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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,471	10/22/2002	Ronald Louis Quaglia	201-0582 GAS	5654

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EXAMINER

KRAMER, DEVON C

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 05/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/065,471

Applicant(s)

QUAGLIA ET AL.

Examiner

Devon C Kramer

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 3-5 and 10-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-9 and 13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1) This application contains claims directed to the following patentably distinct species of the claimed invention:

Species 1: Figures 1-2;

Species 2: Figure 3;

Species 3: Figure 4;

Species 4: Figures 5-6.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2) During a telephone conversation with Gary Smith on May 21, 2003 a provisional election was made without traverse to prosecute the invention of species 1, claims 1-2, 6-9 and 13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 3-5 and 10-12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3) Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Objections

4) Claims 8, 9 and 13 are objected to because of the following informalities: Claim 8 recites in line 5, "beginbeginand". Appropriate correction is required.

Claim Rejections - 35 USC § 102

5) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6) Claims 1-2, 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al (5746292).

In reference to claim 1, Tanaka et al provides a component of a vehicle disk brake, the component (15, 5b) having at least one hole formed therein and a tuned mass damper (figure 14) disposed substantially within the hole. Please note that the “component” of applicant’s claim can be the combination of the backplate, pad and caliper.

In reference to claims 2 and 9, Tanaka et al provides a component wherein the hole is blind, a thinned section of the component forming a bottom of the hole, and the tuned mass damper comprises the bottom of the hole and a mass attached directly to the bottom such that deflection of the bottom permits the tuned mass damper to oscillate relative to the component (figure 13). Please note that the component encompasses the entire assembly of Tanaka including the pad, backplate and caliper. The thinned section is the portion that extends into the pad portion because it is inherent that the pad of Tanaka has a planar surface. The mass damper includes the rod portion (16) which is attached to a portion of the bottom of the hole. The mass is directly attached via other components to the bottom of the hole.

In reference to claim 7, Tanaka et al provides an apparatus where the component is a backplate for mounting a brake pad. Please note that applicant states in claim 1, "a tuned mass damper disposed substantially within the hole". Applicant does not claim that the mass damper is substantially and entirely within the hole and the rod portion is part of the mass damper.

In reference to claim 8, Tanaka et al provides an apparatus comprising: a brake pad (2b) operative to apply a braking force to a brake rotor, said brake pad being subject to vibration during braking; a backplate (15) connected to the brake pad, said backplate having a hole (31, figure 14) formed therein; and a tuned mass damper (16, 16a, 6c, 7c) disposed substantially within the hole and connected to the backplate for damping vibrations associated with operation of the brake assembly. Applicant does not claim that the mass damper is substantially and entirely within the hole and the rod portion is part of the mass damper.

Claim Rejections - 35 USC § 103

7) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8) Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka et al (5746292) in view of Matsuzaki (4691810).

Tanaka et al is silent to locating the hole near an anti-nodal area.

Matsuzaki teaches placing a vibration damping structure at an anti-nodal point along a brake structure. (Col 2 lines 21-26)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the damper of Tanaka et al at anti-nodal points as taught by Matsuzaki in order to dampen the vibrations more efficiently. By placing the damper at a nodal or anti-nodal point, the number of dampers required to reduce the vibrations are reduced.

Conclusion

9) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Brosilow, Yano et al, Saumweber et al, Schorn et al, Nishizawa et al, Branson et al, Thiel et al, Biswas, Katz et al, and Hummel et al all provide brake pad assemblies comprising means to prevent noise and vibrations .

10) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C Kramer whose telephone number is 703-305-0839. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-3519 for regular communications and 703-308-3519 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1134.

DK
May 21, 2003

DEVON C. KRAMER
PATENT EXAMINER
Devon
5/21/03